### Summary of DAT Conference Call 1/15/2008

Participants: EChappell(DWR), JSpeegle(FWS),
 JWhite(DFG), AChu(DWR), BOppenheim(NOAA),
 BPoytress(FWS), LShih(CCWD), LBartoo(FWS),
 FBrewster(SCVWA), TBoardman(SLDMWA),
 BFujimura(DFG), SFord(DWR), FFeyrer(DWR),
 JSandberg(BR), NHindman(FWS), ADVorak(SWC),
 JAdib-Samii(DFG), DFullerton(MWD), JSnow(WWD),
 DAbellon(DWR), TSwanson(BI), RSitts(MWD)

### Conclusions and Recommendation

Juvenile Chinook catch increased at Knight Landing and in the Delta monitoring. In addition, the first non-clipped winter-run length Chinook were salvaged at the Delta Fish Facilities last week.

In compliance with the Wanger Interim Remedial Order the Project Agencies implemented the delta smelt remedy action 1.B.3.b(1) on January 7<sup>th</sup>. This action will continue until there is evidence of spawning. Under Action 1.B.3.b(1) the Projects are required to achieve an average net upstream flow of Old and Middle Rivers not to exceed 5000cfs on a 7-day running average.

No operational changes were recommended at this time.

Due to the Monday holiday the DAT group decided to move the next DAT call to Wednesday, January 23<sup>rd</sup>. The call-in number will be 916/574-2008.

Next DAT Conference Call Wednesday, 1/23/2008, 9:00 am - 11:00 am. 916/574-2008.

### Chinook Monitoring

Upper Sacramento River

Red Bluff Diversion Dam – FWS estimated winter-run passage averaged 1400 per day in the last week but the passage is decreasing. So far passage this season is 1.48 million.

Late fall Chinook passage averaged 60 per day and spring-run passage averaged 560 per day. Fall Chinook passage continues to dominate the catch

averaging 85,000 per day. The steelhead passage increased slightly averaging 20 per day. FWS has also been catching both adclipped Chinook and steelhead. Flows at Bend Bridge are 6,500cfs and decreasing.

FWS posts biweekly reports on the Bay-Delta and Tributaries Project website, at <a href="http://baydelta.ca.gov/Php/Special\_Reports/red\_bluff.php">http://baydelta.ca.gov/Php/Special\_Reports/red\_bluff.php</a>.

Mill Creek – No update.

Deer Creek – No update.

Butte Creek - No update.

GCID – DFG pulled the rotary screw trap between January 4<sup>th</sup> and the 11<sup>th</sup>. In the last three days the catch of older juvenile Chinook ranged from 1 to 2 per day. The catch of fry Chinook has also decreased ranging from 0 to 14 per day. DFG also caught 9 adclipped Chinook, 1 non-clipped steelhead, and 34 adclipped steelhead.

Knights Landing – Catch of Chinook increased in the last week. The catch of older juvenile Chinook ranged from 4 to 26 per trap day. The catch of fry/smolt Chinook dominated the catch ranging from 511 to 1800 per trap day. DFG also caught 16 adclipped Chinook and 10 adclipped steelhead.

#### **Delta Monitoring**

In the last week, the catch of Chinook increased in the Sacramento trawl and the beach seining. FWS also caught 2 splittail and 12 delta smelt at Chipps Island, 1 delta smelt in the Sacramento Area seine, and 1 delta smelt in the Bay seine.

Sacramento Kodiak Trawl - 3 sample days, 26 samples. FWS caught 9 older juvenile, 150 fry/smolts, and 33 adclipped Chinook. They also caught 1 steelhead (212mm).

Lower Sacramento River seine – 1 sample day, 3 samples. FWS caught 5 older juvenile, 16 fry/smolts and 1 adclipped Chinook but no other species of interest.

Sacramento Area seine – 1 sample days, 8 samples. FWS caught 10 older juvenile, 111 fry/smolts, and 3 adclipped Chinook. They also caught 1 splittail and 1 delta smelt. The delta smelt was caught at Verona and was 65mm in length.

North Delta seine - 1 sample day, 5 samples. FWS caught 1 older juvenile, 132 fry/smolts, and 4 adclipped Chinook.

Central Delta seine - 1 sample day, 8 samples. FWS caught 16 fry/smolts and 3 adclipped Chinook.

South Delta seine - 1 sample day, 7 samples. No species of interest.

Mossdale Kodiak Trawl - 3 sample days, 30 samples. No species of interest.

San Joaquin River seine - 1 sample day, 7 samples. FWS caught 1 older juvenile Chinook and no species of interest.

Chipps Island Midwater Trawl - 2 sample days, 24 samples. FWS caught 5 older juvenile and 7 adclipped Chinook. They also caught 2 splittail and 12 delta smelt. The lengths of the delta smelt were in the mid-60's (mm). Sampling was suspended on January 10<sup>th</sup> to avoid additional take of delta smelt. Sampling will resume on Thursday, 1/17.

Bay seine - 1 sample day, 5 samples. FWS caught 1 delta smelt (54mm) and no other species of interest.

Delta Action 8 – The second portion of the Delta Action 8 experiment will begin today, 1/15. FWS will release 130 acoustically tagged Chinook in West Sacramento over a 24 period starting today. The second group of 80 acoustically tagged Chinook will be released in Georgiana Slough starting on 1/17. Approximately 70,000 CWT Chinook will also be released in Georgiana Slough on 1/17 and 36,500 released at Ryde on 1/18.

Spring-run Surrogates – The first spring-run surrogate release of Coleman Hatchery late-fall Chinook was

made in late November. So far the expanded loss at the Delta Fish Facilities is 8 or 0.005% of the total release. FWS will make the second spring-run surrogate release this week. They will release approximately 83,750 late-fall Chinook in Battle Creek.

### **Delta Smelt Monitoring**

FMWT – The December delta smelt index is 10 and the Annual index is 28. This is the second lowest annual index for delta smelt. All of the indices for the 2007 survey are posted at <a href="http://www.delta.dfg.ca.gov/data/mwt/">http://www.delta.dfg.ca.gov/data/mwt/</a>.

Spring Kodiak Trawl – DFG completed the first SKT survey last week. DFG caught 132 delta smelt during the survey. The smelt were widely distributed but the highest concentration was found in the lower Sacramento River where 80 delta smelt were caught. The second highest concentration was in the Sacramento Deep Water Ship Channel where 28 were caught. DFG caught 9 in Suisun Bay, 7 near the confluence, 7 in Cache Slough, and 1 on the lower San Joaquin.

The smelt ranged in length from 58 to 76mm, averaging 67mm. Most of the females had a reproductive stage of 2 with a few at stage 3. Most of the males had a reproductive stage of 3 with a few at stage 4. Females are considered ripe at stage 4 while males are considered ripe at stage 5. The total number caught was similar to the first survey from last year (109) and the distribution is slight more easterly this year compared to last year.

DFG will begin Survey 2 on February 4<sup>th</sup>. No supplemental surveys will be conducted this year.

Judge Wanger's Order – the Project Agencies implemented the delta smelt remedy action 1.B.3.b(1) on January 7<sup>th</sup>. This action will continue until there is evidence of spawning. Under Action 1.B.3.b(1) the Projects are required to achieve an average net upstream flow of Old and Middle Rivers not to exceed 5000cfs on a 7-day running average. The operators anticipate this action will last for quite some time as spawning is not

expected to start until water temperatures increase to at least 12C.

Once the onset of spawning has been detected, either by salvage monitoring or survey monitoring, the next action is triggered. Under this action the Projects are required to achieve an average net upstream flow of Old and Middle Rivers between 750cfs and 5000cfs on a 7-day running average until the entrainment risk has abated. In addition, once spawning has been detected new larval and juvenile monitoring programs will begin at the Delta Fish Facilities.

Based on preliminary estimate, the cost of Action 1.B.3.a(1) (10-day OMR average of -2000cfs) could potentially be as high as in the range of 40 to 60 taf on the State side. The cost of Action 1.B.3.b(1) could potentially be in the range of 4 to 8taf per day on the State side. DWR will need to conduct some modeling to validate these costs for both Projects.

### Salvage Facilities -

Chinook – CVP salvaged 48 adclipped Chinook last week for a loss of 35. CVP also had a loss of 9 winter-run Chinook. SWP salvaged 4 winter-run Chinook for a loss of 17. They also salvaged 4 adclipped Chinook for a loss of 17. The combined loss of (non-clipped) winter-run Chinook is 26 so far this season.

Steelhead – None.

Delta smelt – CVP salvaged 4 delta smelt on 1/11. The observed delta smelt was 68mm in length and resulted in an expanded salvage of 4. The smelt was a male and was the first smelt salvaged so far this season.

Splittail – SWP salvaged 31 splittail for a season total of 68. CVP salvaged 56 splittail for a season total of 56.

Longfin smelt - None.

Sturgeon – None.

At Jones Pumping Plant they are counting for 30 minutes every two hours. The increase in the counting period from 10 minutes to 30 minutes was implemented on December 19<sup>th</sup> as part of the Judge Wanger's delta smelt order (1.B.2).

The CVP had a scheduled outage yesterday, 1/13. The TFCF was not operating for about an hour at noontime.

The DFG Salvage Database is available on the DFG ftp site (ftp://ftp.delta.dfg.ca.gov/salvage/).

### **Operations**

#### SWP -

CCFB - 3,000cfs.

Oroville – 1,450cfs X2 - < 81 km

E/I - 14-day ~25%

San Luis - ~697taf. SWP share of San Luis capacity is 1,062 taf.

#### CVP -

Jones PP - 2,800cfs. CVP dropped one unit to help meet the OMR flow objective.

DCC - closed.

Trinity - 300cfs

Clear Creek - 200cfs

Keswick – 4,000cfs. The BR will start dropping the release down to 3,500cfs this week.

Nimbus – 1,000cfs

Goodwin – 225cfs

San Luis - ~693taf. CVP share of San Luis capacity is 966 taf.

#### Flows

Sacramento River at Freeport ~ 22,688cfs

Fremont Weir ~ 0

San Joaquin River at Vernalis ~ 1,647cfs

Delta Outflow ~ 18,702cfs. The 7-day average is 24,780cfs.

Old & Middle River flow ~ for 1/14, the daily average is -4229cfs and the 7-day average is -4960cfs.

Temperature – (daily average – 1/13)
Antioch ~ 8.7C
Rio Vista ~ 8.5C
Mossdale ~ 10.9C
3-Station Average ~ 9.4C

### **Delta Water Quality**

Since December 28, the Delta is in excess conditions due to OMR fish action objective. Salinity levels continue to improve except in the South Delta where it increased slightly.

January Water Quality Standards -

Delta Outflow – monthly average >= 4,500cfs, 7-day average >= 3,500cfs.

Delta Cross Channel – The gates may be closed for up to 45 days for the protection of Chinook between November 1<sup>st</sup> and January 31<sup>st</sup>.

E/I Ratio - 65%

Contra Costa Canal – Cl <= 250 mg/L. In addition, Cl <= 150 mg/L for 165 days per year. This portion of the standard was met in 2007 and started again January 1, 2008.

South Delta – 30-day average EC <= 1.0.

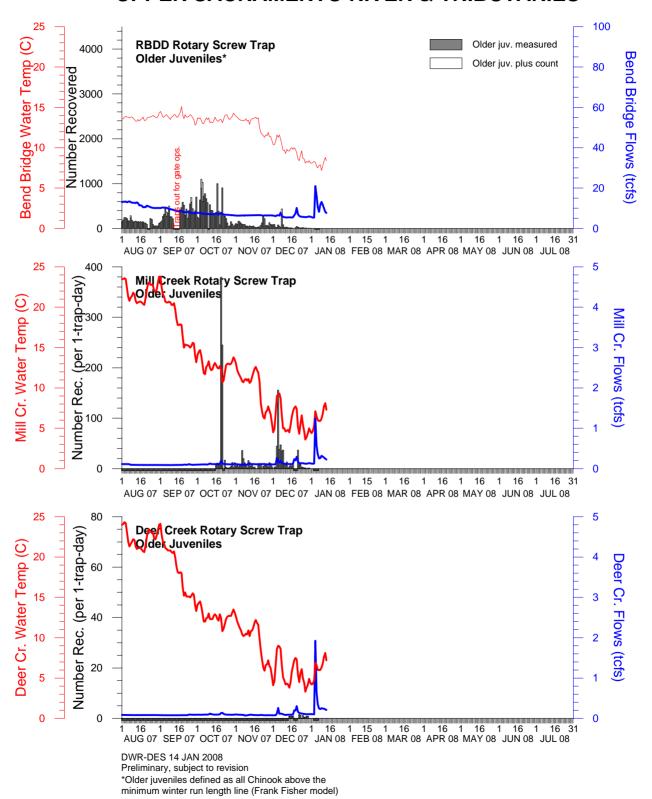
Suisun Marsh - <=12.5mS/cm.

Final copies of the DAT notes are now available on the CALFED Operations website at

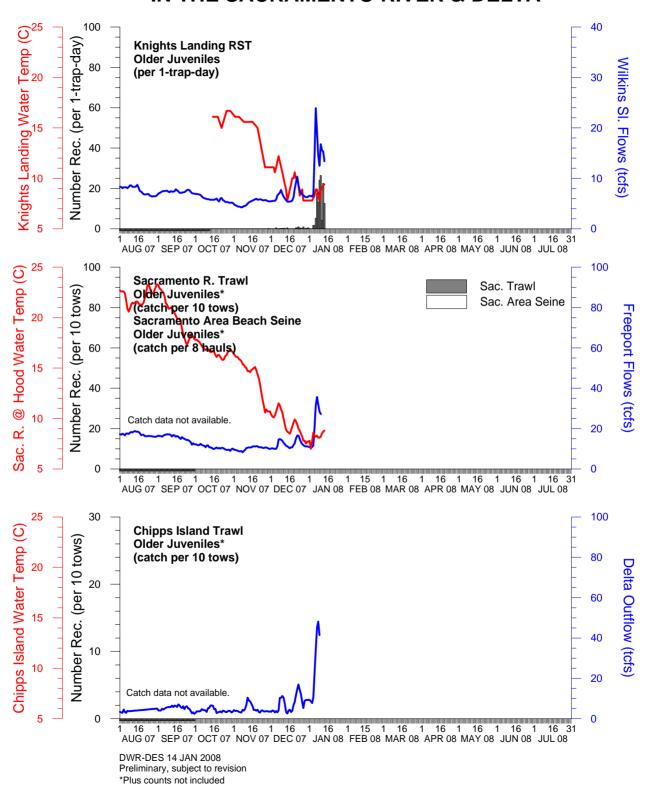
http://wwwoco.water.ca.gov/calfedops/datsummaries.html.

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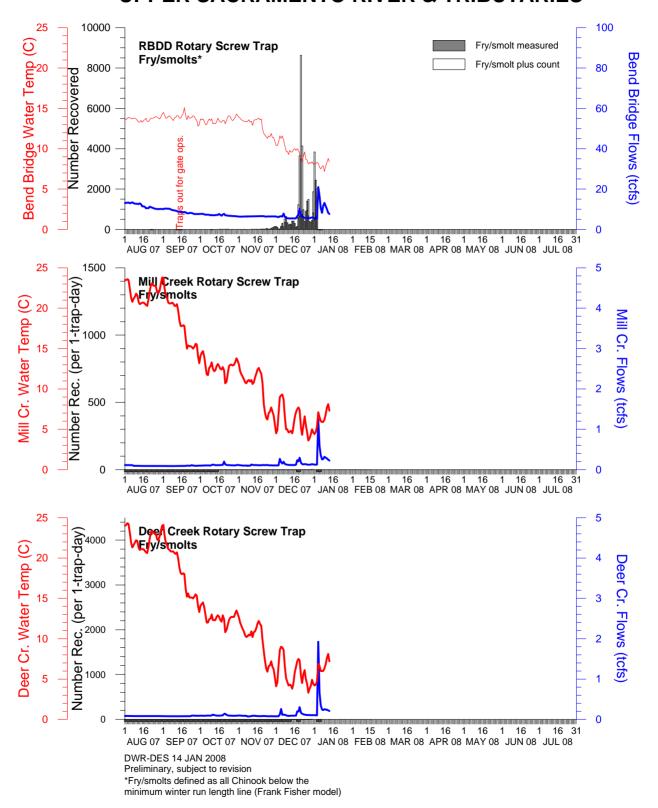
## NUMBER OF JUVENILE CHINOOK MEASURED IN THE UPPER SACRAMENTO RIVER & TRIBUTARIES



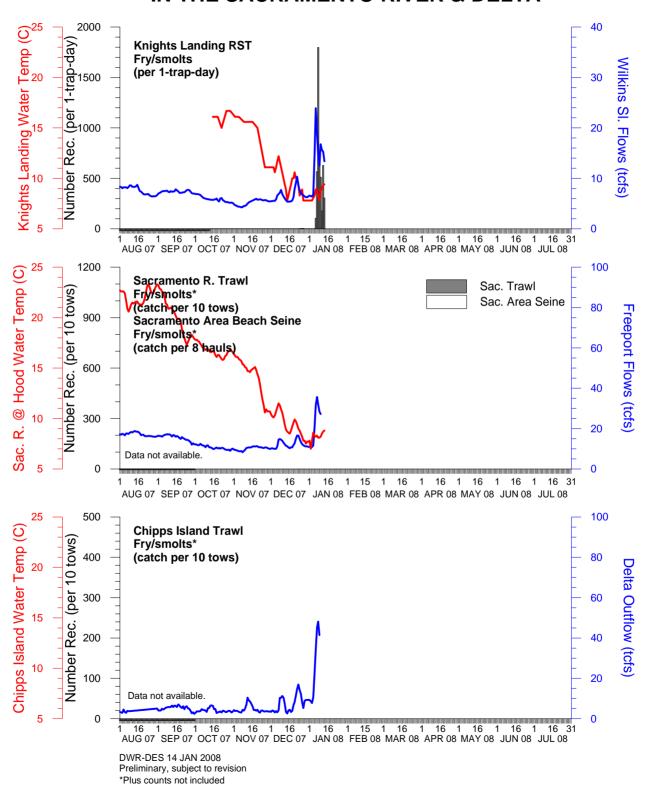
## NUMBER OF JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER & DELTA



## NUMBER OF FRY/SMOLT CHINOOK MEASURED IN THE UPPER SACRAMENTO RIVER & TRIBUTARIES



## NUMBER OF FRY/SMOLT CHINOOK MEASURED IN THE SACRAMENTO RIVER & DELTA



### **Data Acquisition:**

All the data is preliminary and subject to revision.

The catch data for RBDD, Sacramento River Trawl, Sacramento Area Beach Seine, and Chipps Island were obtained from the BDAT website: <a href="http://baydelta.ca.gov">http://baydelta.ca.gov</a>.

The catch data for Mill and Deer creeks were obtained directly from DFG, Red Bluff Juvenile Salmon Monitoring Project.

The catch data for Knights Landing were obtained directly from DFG, Native Anadromous Fish & Watershed Branch.

The hydrology data were obtained from either the CDEC or BDAT websites: <a href="http://cdec.water.ca.gov">http://cdec.water.ca.gov</a> or <a href="http://baydelta.ca.gov">http://baydelta.ca.gov</a>.

### **Project Offices:**

Mill Creek - DFG, Red Bluff Juvenile Salmon Monitoring Project

Deer Creek - DFG, Red Bluff Juvenile Salmon Monitoring Project

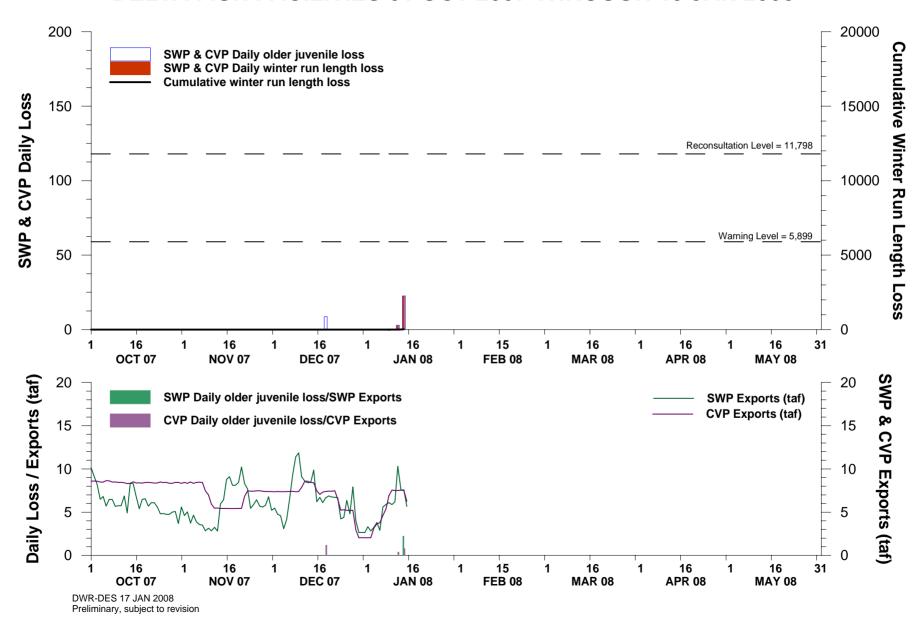
RBDD - USFWS, Red Bluff Fish & Wildlife Office Knights Landing - DFG, Native Anadromous Fish & Watershed Branch

Sacramento Trawl - USFWS, Stockton Office Juvenile Salmon Monitoring

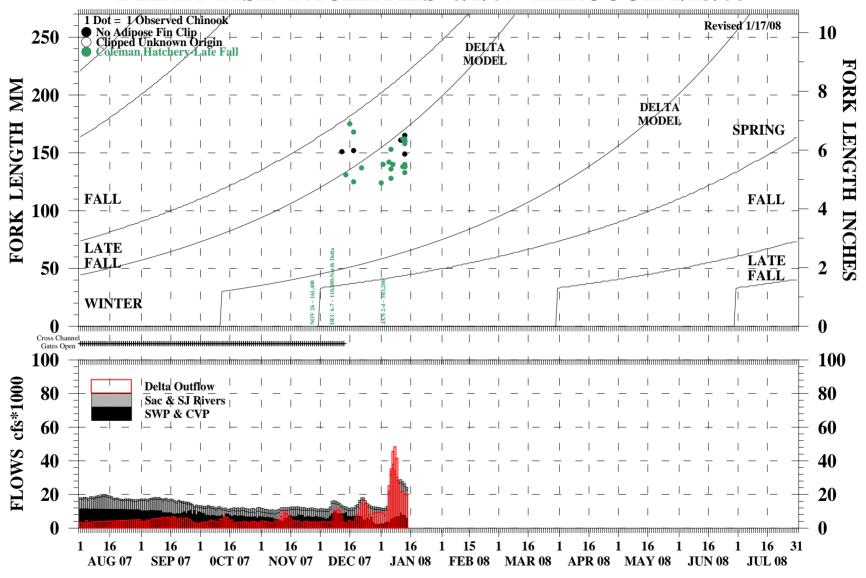
Sacramento Area Beach Seine - USFWS, Stockton Office Juvenile Salmon Monitoring Project

Chipps Island Trawl - USFWS, Stockton Office Juvenile Salmon Monitoring Project

## WINTER RUN & OLDER JUVENILE CHINOOK LOSS AT THE DELTA FISH FACILITIES 01 OCT 2007 THROUGH 13 JAN 2008



# OBSERVED CHINOOK SALVAGE AT THE SWP & CVP DELTA FISH FACILITIES 8/1/07 THROUGH 1/13/08



### Salmon Salvage and Loss From 01-Oct-07 to 13-Jan-08

LateFall run at CVP facility	SampleDate	Adipose Clipped		Not Clipped	
		Salvage	Loss	Salvage	Loss
	12/12/2007	0	0	0	0
	12/16/2007	12	9	0	0
	12/18/2007	12	9	12	9
Sum of LateFall run at CVP		24	17	12	9
Winter run at CVP facility		Adipose Clipped		Not Clipped	
	SampleDate	Salvage	Loss	Salvage	Loss
	12/14/2007	12	8	0	0
	12/18/2007	12	9	0	0
	12/22/2007	4	3	0	0
	01/01/2008	4	4	0	0
	01/02/2008	4	4	0	0
	01/05/2008	4	4	0	0
	01/06/2008	12	10	0	0
	01/07/2008	4	3	0	0
	01/11/2008	0	0	4	3
	01/12/2008	8	6	0	0
	01/13/2008	24	17	8	6
Sum of Winter run at CVP		88	66	12	9
Sum of all races at CVP		112	84	24	17
Winter run at SWP facility		Adipose Clipped		Not Clipped	
	SampleDate	Salvage	Loss	Salvage	Loss
	01/13/2008	4	 17	4	 17
Sum of Winter run at SWP		4	17	4	17
Sum of all races at SWP		4	 17	 4	17
Total for 10/1/2007 to 1/13/2008	3	116	101	28	34

Monday, January 14, 2008 Page 1 of 1

### Special Species Salvage From 23-Nov-07 to 13-Jan-08

Delta Smelt	=========	=======	========= SWP	=======================================	CVP	
	SampleDate			Salvage		
	01/11/2008	0		4	7505	
Total for Delta Smelt		0		4	7505	
Longfin Smelt	=======================================	SWP		CVP		
	SampleDate			Salvage	Acre Feet	
	12/18/2007	0		12	7392	
Total for Longfin Smelt		0		12	7392	
Splittail	=========	SWP		CVP		
	SampleDate			Salvage		
	11/23/2007	9	5437	0		
	11/25/2007	6	6424	0		
	11/26/2007	3	5699	0		
	11/28/2007	3	5791	0		
	01/02/2008	4	2819	0		
	01/06/2008	12	5600	0		
	01/07/2008	0		4	5355	
	01/08/2008	3	6094	0		
	01/09/2008	24	5873	16	7553	
	01/10/2008	0		4	7495	
	01/11/2008	0		16	7505	
	01/12/2008	0		12	7543	
	01/13/2008	4	7575	4	7501	
Total for Splittail		68	51312	56	42952	

Tuesday, January 15, 2008 Page 1 of 1